

REMARKS

Reconsideration of the above-identified application is respectfully requested.

In the office action dated September 16, 2005, claims 1-10 are rejected. Claims 1-8 are rejected under 35 U.S.C. § 103 over Dias (U.S. 6,540,791 B1) (hereinafter "Dias"). Claims 9-10 are rejected under 35 U.S.C. § 103(a) over Dias in view of Tomiyuki et al. (JP 05-085918).

In response to the rejections, Applicants have amended claim 1 to incorporate the limitation of claims 3-4 into claim 1. As a result, claims 3-4 are cancelled. Additionally, new claims 11-17 are added. Claim 11 is fully supported by the specification, *e.g.*, on page 5, paragraph [0021]; claim 12 is fully supported by the specification on page 7, paragraph [0027]; claims 13-17 are fully supported by the specification on page 5, paragraph [0024] to page 7, paragraph [0027], and claims 2-4 as originally filed. No new matter has been introduced.

Applicants respectfully submit that the amendments of the claims have obviated the rejections under 35 U.S.C. § 103 for the reasons set forth below:

Claim Rejections under 35 U.S.C. § 103

Claims 1-8 have been rejected under 35 U.S.C. § 103 as being rendered obvious by Dias, US 6,540,791 (hereinafter Dias) alone and claims 9-10 have been rejected under Dias in view of Tomiyuki *et al.*, JP 05-085918 (hereinafter Tomiyuki).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success.

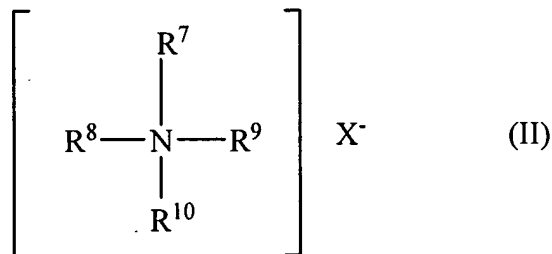
Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *See* MPEP 2142.

Amended Claims

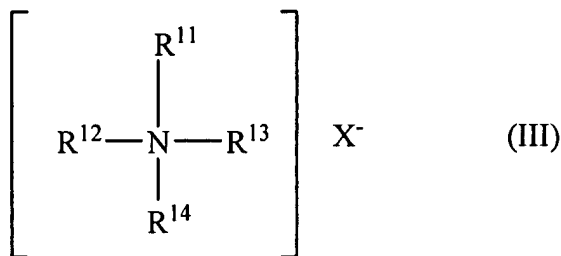
The present case contains two independent claims 1 and 13 after the amendments:

Claim 1 is amended to incorporate the limitation of the original claims 3-4 into the claim, *i.e.*, claiming two or more higher alcohols instead of a higher alcohol. Claim 11 further defines the two or more different higher alcohols as at least two of the following higher alcohols: lauryl alcohol, myristyl alcohol, cetyl alcohol, cetanol, stearyl alcohol, cetostearyl alcohol, behenyl alcohol, 2-octyldodecanol, and oleyl alcohol.

New independent claim 13 defines the quaternary ammonium salt cationic surfactants as either a monoalkyl quaternary ammonium salt represented by formula (II):



where R^7 is a straight or branched alkyl group having 8 to 36 carbon atoms which may be substituted by a hydroxyl group, R^8 , R^9 and R^{10} are the same or different, and each is an alkyl group having 1 to 3 carbon atoms or benzyl group which may be substituted by a hydroxyl group, and X is a halogen atom or an alkyl sulfate group having 1 to 2 carbon atoms; or a dialkyl quaternary ammonium salt represented by Formula (III):



wherein R¹¹ and R¹² are the same or different and each is a straight or branched alkyl group having 8 to 36 carbon atoms which may be substituted by a hydroxyl group, R¹³ and R¹⁴ are the same or different, and each is an alkyl group having 1 to 3 carbon atoms or benzyl group which may be substituted by a hydroxyl group, and X is a halogen atom or an alkyl sulfate group having 1 to 2 carbon atoms.

New dependent claims 12 and 15 further limit the quaternary ammonium salt cationic surfactants to stearyltrimethylammonium chloride, behenyltrimethylammonium, or distearyl dimethylammonium.

Dias (U.S. Patent No. 6,540,791)

Dias discloses “an alkaline hair bleaching composition comprising (a) from about 0.01% to about 12%, by weight, of at least one oxidizing agent; (b) from about 0.2% to about 20%, by weight, of a buffering system, present in an amount sufficient to generate a pH of the composition in the range from about 5 to about 11, wherein said buffering system comprises at least one pH modifying ingredient selected from the group consisting of (i) borates buffers; (ii) alkalizing agents, and mixtures thereof; (c) from about 150 ppm to about 5000 ppm of at least one stablizer; and (d) from about 0.01% to about 50%, by weight, of at least one hair care ingredient selected from the group consisting of (i) surfactants, (ii) catalysts, (iii) thickeners, (iv) conditioners, and mixtures thereof.” (emphasis added) (*See* Abstract of Dias).

The Examiner alleges that Dias teaches alkaline hair bleaching and coloring composition comprising an oxidative hair coloring agent (*see* col. 3, lines 58-62), oxidizing agent (oxidant) (*see* col. 4, line 62), alkalizing agents such as alkanolamine (*see* col. 7, lines 35-50), quaternary ammonium salt cationic surfactants (*see* col. 28, formula (XXIV)) and higher fatty alcohols as claimed in claims 1 and 3-4 (*see* col. 47, line 33) and nonionic surfactant of polyethoxylated fatty alcohols as claimed in claims 5-6 (*see* col. 11, lines 13-14). *See* Office Action at 2.

Argument Traversing the Rejection over Dias

Claims 1, 2, 5-8, 11-12, and 17 are not Obvious in View of Dias

Dias fails to teach or suggest that two or more different higher alcohols are used in the composition. *See e.g.*, all of the Examples (Examples 1-18, as shown in the Table in col. 49-52) in Dias contain no or at most one higher alcohol (*i.e.*, cetearyl alcohol).

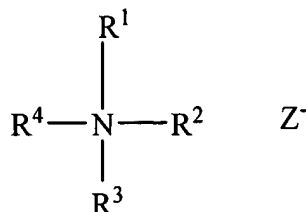
In fact, none of the higher alcohols used by Applicants, as claimed in claims 12 and 17, which includes lauryl alcohol, myristyl alcohol, cetyl alcohol, cetanol, stearyl alcohol, cetostearyl alcohol, behenyl alcohol, 2-octyldodecanol, and oleyl alcohol, is disclosed in Dias.

Dias also fails to teach or suggest that the hair dye composition is substantially devoid of ammonium. As shown in col. 7, lines 34-67 and col. 8, lines 1-2, the alkalizing agents used in Dias is for the purpose of adjusting the pH (*see* col. 7, lines 35-38). In fact, in col. 7, lines 66-67 and col. 8, lines 1-2, the “preferred alkalizing agents” cited by Dias include ammonium hydroxide, monoethanolamine (MEA), ammonium carbonate, ammonium hydrogen carbonate, sodium hydroxide and mixture thereof.” Therefore, unlike what is alleged by the Examiner, Dias in fact teaches and suggests that the inclusion of ammonium, which is contrary to claim 2 of the present claimed invention.

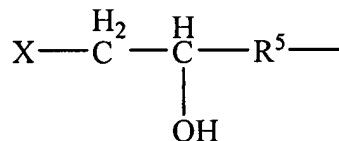
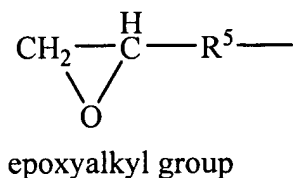
Thus, Applicants respectfully request that the obviousness rejections over Dias be withdrawn.

Claims 13-17 are Not Obvious Over Dias

The Examiner alleges that Dias teaches “quaternary ammonium salt cationic surfactants” as claimed by Applicants. In fact, formula XXIV of Dias has the following structure:
 the following general formula:



where R^1 , R^2 and R^3 are methyl or ethyl groups and R^4 is either an epoxyalkyl group or a halohydrin group as shown below.



halohydrin group

where R^5 is a C_1 - C_3 alkylene, X is chlorine or bromine, and Z is an anion such as Cl^- , Br^- , I^- or HSO_4^- .

However, the composition claims of the current application are not directed to quaternary ammonium compounds that have structural components similar to those disclosed in Dias. In fact, none of the claims of the current application are directed to or encompass a quaternary ammonium salt cationic surfactant having a substituents with any structural similarity to an epoxyalkyl or halohydrin group. Accordingly, since Dias does not teach or suggest the “quaternary ammonium cationic surfactants” as claimed in independent claim 13 and the

dependent claims thereof, there is no *prima facie* case of obviousness, and the obviousness ground for rejection should be withdrawn.

Claim Rejections Under 35 U.S.C. § 103

Claims 9-10 are rejected under 35 U.S.C. § 103(a) over Dias in view of Tomiyuki et al. (JP 05-085918) (hereinafter "Tomiyuki"). The Examiner, however, admits that Dias does not teach or disclose a dyeing composition comprising amino-modified polymer silicone of the formula (I) as claimed. *See* Office Action at 4. But the Examiner alleges that Tomiyuki teaches the amino-silicone polymer having a formula similar to the claimed formula (I) (*see* page 2, the upper formula). *See* Office Action at 4.

Without conceding that the formula as shown in Tomiyuki et al. is similar or dissimilar to that of the claimed formula (I), since Dias fails to teach or disclose that there are two or more higher alcohols, that the composition is substantially devoid of ammonium, and that the quaternary ammonium cationic surfactants are as described in Formulas (II) or (III) of claims 13-17, the addition of Tomiyuki does not supplement the deficiency. Therefore, the combined teachings of Dias and Tomiyuki do not teach or suggest all of the claimed elements so that the Examiner has not established a *prima facie* case of obviousness. Applicants therefore respectfully request that the rejections over Dias in view of Tomiyuki be withdrawn.

In view of the above amendments to the claims and the foregoing remarks, it is believed that there is no teaching or suggestion in any of the references cited to recombine or modify the substituents in a manner that would achieve a composition within the scope of the present claims. It is therefore submitted that the pending claims are not rendered *prima facie* obvious by the

Appl. No.: 10/722,546
Response dated March 13, 2006
Reply to Office Action of September 16, 2005

disclosure of any of these references. Accordingly, entry of the above amendments, withdrawal of all grounds for rejection and the allowance of all claims presently pending in this application are believed to be in order, and are respectfully requested. Should the application not be passed for issuance, the examiner is requested to contact the applicant's attorney to resolve the problem.

Respectfully submitted,

March 13, 2006



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